

A SHORT
TREATISE

OF

Artificial Stone,

As 'tis now MADE,

And Converted into all Manner of
CURIOUS EMBELLISHMENTS,
And PROPER ORNAMENTS,

OF

ARCHITECTURE:

CONTAINING

The *most Beautiful*, the *Strongest*, and the
Cheapest Method, of *Adorning* BUILDINGS
of all Sorts.

BEING

An *Excellent* and *most Useful* ART, well known
to the ANCIENTS, but lost to the WORLD for many
Ages; now retriev'd.

By RICHARD HOLT, GENT.

——— Utile Dulci, HOR.

Arts in Multis Naturam vicit, in nullâ verò re clarius, quam
in CEMENTIS LAPIDUM, apparuit. DIOD. SICUL.

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(Price One Shilling.)

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To the Right Honourable

RICHARD

EARL of BURLINGTON,

BARON CLIFFORD of LONDER-

BURGH in *Yorkshire*, BARON of YOUNG-

HALL and BANDON, VISCOUNT of

KYNALMEADY and DUNGARVAN, EARL

of CORKE in the Kingdom of *Ireland*,

CHIEF GOVERNOR of the

County of CORKE, and of the City and

County of the City of CORKE, LORD

HIGH TREASURER of IRELAND,

LORD HIGH STEWARD of the Ho-

nour of KILNAREBURGH in the County of

***York*, CUSTOS ROTULORUM and**

LORD LIEUTENANT of the WEST

RIDING of the County of *York*, and of the

City and County of the City or Aynsty of

YORK, and One of HIS MAJESTY'S

Most Honourable PRIVY-COUNCIL.

MY LORD,



If the *Maxim* of *Philoso-*
phers be true, That the
Seeds of *Good* and *Evil*
slide along with the *Blood*, 'tis no

wonder that *Your Lordship* is so eminent for all the GRACES, and for all the VIRTUES, that adorn the *Human Mind*, and become the *Man of Quality*.

YOUR *Lordship* inherits all the transcendent *Faculties* of Your *Ancestors Minds*, as well as *their* most opulent *Estates*: and not only represent the *Family*, and the most *Illustrious Name* of the BOYLES, but also the very *Nature*, the singular *Talents*, and most *memorable Actions* of Your PROGENITORS. *Your Lordship* treads their very *Foot-Steps*, and follows them close, in all that's *truly Great and Good*. *Your Fore-Fathers, My Lord*, have so signaliz'd themselves in the *Arts and Sciences*, that You are (as 'twere) engag'd to go on, in the same Way, and at last to accept of the *Great Reward, IMMORTAL GLORY*.

I H A V E neither *Pen*, nor *Parts*, no *Endowments* fit for *Panegyrick*; if I had, the E A R L of BURLINGTON is so universally well known, that it would be a most *impertinent Attempt*. For, all the *World* knows that his *Soul*, the *Grandeur of his Soul*, is suitable to his *Lordship's Most Noble Extraction*: and his *Mind* too as extensive as his *Fortune*. *Heaven and Earth* have bless'd him, the one with a *Desire*, the other with a *Power to do Good*.

BUT, to say no more on so great a *Subject*; in short then, *My Lord*, the E A R L of BURLINGTON is not only the *nursing Father of all Arts and Sciences*, but also the *common Father of all Artists and Men of Ingenuity*. Where then, could I so
se-

securely shelter *my self*, and *my Artificial Stone*, as under Your Lordship's Protection?

YOUR Lordship is every way qualify'd to defend a good Cause; and, as You are the *best Judge*, both of the *Use* and the *Excellence* of this *Undertaking*, I hope, I may venture to recommend it boldly to Your Lordship's Tuition; especially, since I'm able to plead for't, *what can never fail*, Your Lordship's most generous Promise. The Promise of Your Countenance and Patronage, My Lord, was what (above all Things) I ardently wish'd for.

ALL Beginnings have their Difficulties, and I have struggl'd with mine; but, from the first Day, that Your Lordship was pleas'd to view
my

my *Works*, and to honour me with Your most *Judicious Approbation*, all my *Fears*, *Diffidence itself*, vanish'd. 'Tis then, under Your *Powerful Influence*, My Lord, that, I hope, to raise again *Artificial Stone* to its old *Lustre* and former *Credit*. How can I fail in the *laudable Enterprize*, when Your *Lordship* gives this publick *Sanction* to my honest *Endeavours*; to my *Zeal* and *Industry*, to retrieve, to rake out, from under the many *Ruins of Time*, one of the most *Ancient Arts*, that of *Artificial Stone*. *Artificial Stone*, which, like Your *Lordship's MEMORY*, will last for ever.

MY *Obligations*, My Lord, can never cease, nor my *Gratitude* die, while my *Life* continues: for, the height of my *Ambition* is more than satisfy'd, and fully gratify'd, in having

ving both *the Leave* and *the Honour*,
upon this Occasion, to subscribe my-
self, with the humblest *Submission*,
and with all due *Respect*,

MY LORD,

Your Lordship's

Most Obedient,

Most Devoted,

And most Faithful

Humble Servant,

From the *Artificial*-
Stone-Ware-House,
over-against York-
Buildings - Stairs,
and near Cuper's-
Bridge, in Lam-
beth, SURREY,
1730.

Richard Holt.



A SHORT
TREATISE
OF
ARTIFICIAL STONE, &c.



ARCHITECTURE, and the ORNAMENTS of this *Science*, was justly held in the highest Esteem by the *Ancients*; by the *Goths*, as well as by the *Romans*; and by the *Saxons*, as well as by the *Greeks*: as is manifest from the respective Orders of most magnificent Buildings still extant in this, as well as in the other Parts of the World, to the immortal Glory of their Memories.

NAY, the *Romans* made so much of, and set so high a Value on their Grand Edifices and Publick Buildings of what kind soever,

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that

that it wast hought an Honour too great, for the *Building itself*, and *alone*, to be trusted with the Commemoration of it. But, upon erecting a *Temple*, a *Tower*, a *Harbour*, a *Bridge*, an *Amphitheatre*, or *the like*; *Medals* were ordered to be struck, that thereby they might perpetuate and consign the Memorial of every *such Work* to all distant Places and future Times. The fine *Busto's* of their *Emperors*, *Consuls*, *Generals*, &c. with some such piece on the Reverse, as are still to be met with among the Collections of the *Antiquarians* and Rarities of the *Curious*, fully evince the great Regard that was Justly paid to these *Monuments* of PUBLICK GRANDEUR.

NOW, among the many great and useful ARTS encouraged and improved in *our happy Island*, none seems to thrive better, nor to raise its Head higher than ARCHITECTURE; which, it is observable, the *general Spirit* of the *Nation* runs daily more and more upon. Nor indeed can it make any more generous an Attempt; nor attempt any thing more commendable in itself, more pleasing to private Life, or more engaging to publick Sight. There are not many so lost to common Sensibility, as not to conceive Delight, and take pleasure, in viewing a *well-finish'd* and *embellish'd Structure*, belong to who it will.

How

How great then must needs the Satisfaction of such Proprietors be, especially when their Work is so *accomplish'd* and *done* at a *small Expence*?

AND here, I think, I may venture to say, that our Countrymen can never more be suppos'd to fail in these laudable Attempts; considering that we are now enabled by *this new INVENTION*, which I'm just about to lay open to the World, to build, at least to *beautify* and *adorn*, full as *cheap* as ever our *Ancestors* did, even at *their Penny a Day*; and that too, with all the Elegance of *Greece* and Magnificence of *Rome itself*.

FOR, to the immortal Honour of our *Patrons* of *Architecture* be it said, the present Taste is the most refined, and of the most perfect Kind; free from all *Gothick Rudeness* and *Monkish Foppery*: just in its *Proportions*, and neat in its *Embellishments*: form'd, in short, upon the *Noble Ancient Plan*; which, however may admit of infinite Variety, on account of Singularity in Fancy, or Conveniency in Building, can never, in the Main, be either excell'd, or alter'd to advantage; because it is founded upon the clearest Demonstration of *Truth itself*.

NOW then, I say, when this ART is in so happy a way, what a pity it is, that the whole KINGDOM is not adorned with the most graceful *private* and *publick Buildings*? Since, nothing, sure, can possibly aggrandize a NATION more, than a general Undertaking, a generous Emulation, and a polite Taste in this great Work. A good Exterior in a Man (we see) commands Respect; and why may not the magnificent Exterior of a Country do the same? Some more publick, as well as private, *Advantages* might redound from this, besides employing our Poor, which we now maintain, at a very chargeable rate, *gratis*; 'specially since the noblest part of all BUILDINGS, the GRACEFUL ORNAMENTS, may be done in so easy a manner, without impairing our Strength, or wasting our Substance.

ARCHITECTURE then being in so flourishing a Condition, and the *Genius* of our Age being thus happily bent, wherewithall can I more oblige *the Publick*, than by putting *it* in this desirable Method, and laying a *new Foundation*, not only for the *strongest* and *cheapest* DECORATIONS of *Buildings* in general, but for the most *elegant* and *beautiful* EMBELLISHMENTS of all Sorts of *Structures*? A small Place,

Place, well contriv'd, may have great Con-
 veniency; a small Spot, well laid out, may
 have great Variety; and a small House, well
 adorn'd, may have a grand Air and a no-
 ble Look. I have more than once, seen a
little House and Garden, that did not cost
 a thousand Pounds, making a finer Appear-
 ance, and casting a more splendid Show,
 than another of ten thousand pounds Price.
 And what Gentleman, tho' but of com-
 mon Taste, would not gladly have his *Seat*
 and *House* set off to the best Advantage,
 provided it could be done at an easy
 Charge?

BUT, hitherto the ORNAMENTS of *Stone*
 and *Lead* have come so high, that none but
 Persons of the first Rank or amplest For-
 tunes, could possibly afford them. Where-
 as, in regard to the *Publick*, it is the Mul-
 titude of *Charms*, the Numbers of *Stately*,
 and *well-adorn'd Edifices*, that will prove
 the lasting *Honour* and *Ornament* of our
Country. And in regard to *Particulars*, I
 say, that by the means of this NEW DIS-
 COVERY, every Man may easily gratify him-
 self, readily please his own Fancy, and do
 something towards the GRACING of his
 own *Habitation*, whether great or small.
 For, by it, all former *exorbitant Charges*
 will dwindle to a *Trifle*; and the greatest
 Designs too be much more effectually an-
 swered;

swered; as, by and by, we shall endeavour to make appear.

HOWEVER, in order to this, the Reader must indulge me in giving previously some short natural Account of *STONE in general*; next *in particular*, of the *two Sorts* most in use here for *Building*, and the *Decorations* of Buildings. And in doing of this, tho' I'm far from finding fault with the Produce of Nature, yet (I hope) I may freely advert on what's obvious to every discerning Eye; namely, that there are common Defects in the best *Natural Stone*, and extraordinary Faults in all the *inferior Kinds*.

THIS will appear plain, if we only consider, that the hardest of *Natural Stone* has no other *Cement* or *Tye* for the Combination of its Parts, than what it acquires from Time, either in the Bowels of the Earth, or in the Bottom of the Sea; where the Sand and sandy Particles, by a sort of natural *Trituration*, rarifying and fining, incorporate and unite in a Lump, and coalesce and hold together in one solid Body. However, not so firmly at last, but that the Agitation and Pressure of Water, particularly that of Rain, drove by the Violence of Wind, will insinuate and force itself into the Interstices and Pores (I say) of the strongest and hardest
Stone :

Stone: Which, consisting thus of Sand and earthy Particles, must needs be endu'd with the natural Quality of *Suction*; and, as these are gross and dry Ingredients, so it must needs powerfully attract the ambient Fluid, and readily absorb and imbibe the insinuating Moisture; which, again, in process of Time, and by Degrees, occasions that *Mouldering*, and *Decay*, so visible in all old Buildings made of the best of *Stone*.

BUT, now, more particularly, as to PORTLAND STONE, which is most used here in the Ornaments of Buildings; *this* is strongly impregnated with *Nitrous Salts*, as is evident from its Damps and Sweats in all wet and very hot Weather. And these Salts, according as they more or less abound, either make the Work *brittle*, so as that the least trifling Accident demolishes it at once, 'specially in *small Work*, where the Substance is not too thick or strong, such as, *Pines, Necks, Pots, Urns, Vases, &c*; or then, in larger Substances and stronger Work, where more Time is required, they gradually eat their way thro', and at last the Stones crumble to Dust, and fall out in Holes. And hence the Holes in the Walls of all old, and some new Houses, so far as they are either built or adorn'd with this sort of *Stone*.

AGAIN,

AGAIN, besides this, there is another great *Fault* in *Portland Stone*, as it consists of different *Tempers*: The Stone-Cutters often find, not only in one and the same Quarry, but also and very frequently too in one and the same Piece, one part pretty hard, as it ought to be, and another very *soft like Cheese*. This they always reckon a *Faulty Stone*, and, whatever use is made on't, can never be supposed to last or hang long together. And a third considerable *Fault*, is, that vast Numbers and Clusters of *small Shells* are commonly found in the very Bosom and Center of the *Portland Stone*. And, where this is the Case, whatever is made of it, is liable to Cracks and Flaws; and, on every little Incident, is ready to *fly in Pieces*. These are the Defects and *Faults* of *Portland Stone*, with which I am best acquainted. There may be *more* that I know nothing about.

NOW, as to the BATH STONE, so famous for its *Softness*, and cutting all over *like Cheese*; which is also used for the Ornamental Part of some Buildings; *this* is of a Nature and Quality much inferior to the *Portland Stone*. Wherefore (of consequence) it is not only subject to all the *Faults* and *Defects* in it, and that too in a much greater degree; but (it may be also) to
many

many more. For, as *this Stone* is a spongy Body, compounded of extreme soft and yielding Particles, which, besides the Pores common to all Stones in general, contain within themselves many more considerable Vacuities; so, upon sufficient experience, I dare say, 'twill be found altogether unfit for solid Use and long Service.

'TIS certain, that this *Bath Stone* is not so much as Portable from the Quarry, much less then can it be converted to use, so as to be erected or set up in any shape, before it has acquired a *certain Exterior*, or *Coat*, peculiar to itself, commonly called its *hard Face*, or *Scurf*; which requires a very long airing or standing in the Weather; I am told, for two or three Years, before it can either be exposed to Carriage, or applied to any useful end, except it be upon the Spot. And, in this *weathering* or *airing*, if any of the first Seasons prove wet, the *Attraction* of this *porous Body*, the *Suction* of its loose and *pervious Texture*, is so strong, and consequently the Quantity of *imbib'd Water* so great, that *any hard Frost* succeeding nips the Stone, seizes the Water, and demolishes, at least endangers, the Work made of it, whatever it be.

OR, if at this rate, the *Fabrick* does not immediately *fall to pieces*, a few Years discover it to be (like many other Natural Bodies) all *hollow at the Heart*, decayed and rotten on the Inside, for all its *Harness* or *Coat of Mail* on the out; which may support and keep it erect for a while, but will be found altogether insufficient and incapable of doing so for any considerable Time. These Circumstances make it out pretty clear, that *Bath Stone* and *Cheese* are very near a-kin; for, as the *latter* acquires its *Coat*, by standing in the *Air*, so does the *former* also, and much about a Time too. Again, as the least Water, or degree of Moisture, spoils and rots *Cheese*, so 'tis plain the Effects are the same in this sort of *Stone*; which, by the Influence of the *Sun*, may also in time produce the very *Maggots* of its *analogous Body*, or something very like them.

FOR these Reasons and the other Defects in this *Material*, The ANCIENTS did not trust their grand *Buildings*, at least not their *Decorations* and *Capital Ornaments*, to the Work of *Natural Stone* of any kind; but being well acquainted with all the other *Products* of Nature, were at no Loss to find out an extraordinary *Tye*, a peculiar *Cement*, for binding of CLAY together, so as to make an ARTIFICIAL STONE far superior,

perior, both in Strength and Beauty, to the best and hardest *Natural Stone*. By the means of which *Artificial Composition*, they Beautified and *Adorned* at the cheapest Rate, in the quickest Way, and after the most elegant Manner, their great *Structures* of all Sorts; which, by the *same means*, they made so strong and dureable, that no *Time* has been able to efface them. No, by their *Artificial Stone*, they have most ingeniously prevented all the *Mischiefs of Time itself*; witness the noble *Edifices* and Magnificent Old *Buildings*, which all Places of the World have still to shew in Evidence of this *Truth*.

BUT to our Regret and the World's Loss, the *Knowledge* and *Art* of the *Ancients in this Affair*, their *Secret* and *Mystery in this particular*, as in many other Things, have died and been buried with themselves. What a pity it is, that, with the *Old Romans*, so many valuable *Secrets*, (and *this* among the Rest) should have perished and been Lost to the World? Many Ages have already suffer'd, and future Times will have Reason to Remember the Effects of *this unspeakable Loss*.

HOWEVER yet, in my humble opinion, that is not all we have to be sorry for upon *this head*; for, we have cer-

tainly as good reason to bemoan the Low Ebb of *Industry* since those times: And indeed to grieve that succeeding Ages have not been as *Inventive* and *Fruitful* of Contrivances. Nor, to speak freely, can I think it Commendable in us to sit down quietly and content under such very considerable Losses, as the World has suffered in those Respects. 'Tis bad *Husbandry* and the want of *Manure* that render *Lands* Barren; and it is *Industry* and the Exercise of the *Mind alone* that make *Invention* fruitful.

THESE serious Considerations put me, prompted as I was by a warm Inclination, upon the most laborious Search, upon the tedious Tryal of many Experiments, and upon the reiterated Experiments of many odd things, many various Preparations and different Compositions, in order to find out the OLD TYE, the FIXT CEMENT of the *Ancients*. I say, I was Instigated by, I know not what, Natural Impulse, to examine narrowly, and dive, as deep as I could, into the Nature of CLAYS of all Sorts, and into the Qualitys of many other, both Natural and Artificial, *Bodys*, in order to recover this *vast Loss*, *this precious Lute or Solder*. And as in this *great Work* of wide Scrutiny, I was happily assisted by an *Industrious Genius*, so I left no Stone unturned

to bring about my *Wish* and to accomplish my *Purpose*.

AND when I found, that this part of NATURAL KNOWLEDGE was not to be met with among the *Learned*, the *Virtuoso's*, and great *Masters of Arts* in *Europe*, I quickly resolved and went into *Asia* and *African Turkey*, to see what I could Learn from, and pick up among, the *Turks*, and the Race of the *Old Egyptians*, relating to the same Affair; and this I was the more readily induced to do, considering the Fame of this most *Ancient People* for the *Invention* of all *Arts* and *Sciences*. The *Egyptians of old* were so sensible of the *Use* and *Benefit*, and so renown'd for *the Make*, of this same ARTIFICIAL STONE, that they employed more than six hundred thousand Men *in this Way* for several Centuries.

HOWEVER our *Interpreters* have been pleas'd to call this Sort of *Stone*, that the *Israelites* were so employ'd in, by the name of *Bricks*, yet I must here observe, that several of the most eminent *Writers* of *Egyptian Antiquities*, as well as *Hermes Trismegistus* himself, *Xenophon*, *Herodote*, *Suidas*, and *others*, call it expressly *Artificial Stone*; a *Composition of Earths* and *Artificial Cements*; and as they further describe it, must differ vastly from the *Bricks* of

of our Days; and consequently be the same with my *Affair in hand*; witness the many considerable Remains of *Antiquity*, the numbers of *Towers*, the stately *Pillars*, the curious *Obelisks*, some still standing in and near to *Ancient Alexandria, Grand Cairo, &c.* The *Egyptian Pyramids*, commonly called *King Pharoah's Hills*, those famous *Artificial Stone Monuments of Antiquity*, which devouring *Time* can never consume. The famous *Bust*, called *Sphinx*, all one *Stone*, adjacent to the biggest *Pyramid*, representing the *Face and Breasts* of a *Woman*, whose *Head*, according to *Pliny*, is a hundred and thirty Feet in Circumference, and forty-three long, can scarce be supposed to be one of our Modern *Bricks*.

BUT to my Purpose, I say, when I found that one Place of the World could not satisfy my *Curiosity*, nor thoroughly inform my *Judgment*, I made no Scruple to visit another; where however I can no more say, I met with what I now know and practise concerning *this Affair*, than I did at home. And yet, for all this, every Country, every Place, lent me a list, gave me some useful Hint; which always afforded my *Fancy* fresh Supplies of *Thoughts*, and laid open a new *Scene* of *Experiments* to my *View*. Till at last, after a long Series of wandring Troubles and Fatigues, and after

after spending and making through a pretty small Fortune, as well as the best part of my Time; PROVIDENCE, which (I believe) with-holds nothing, *no Blessing*, from the *Diligent* and *Industrious*, was pleas'd to let me into the ADMIRABLE SECRET. *A Secret*, I call it, because, to my knowledge, *no Man*, this day alive, has it, or knows it but my self. *A Secret*, whose just Value, Excellency and Use will be better known to succeeding Generations, than to the present Times.

HOWEVER, I must acknowledge that *this Affair* has not always been the same even in my own hands; for, like all *Projectors*, I've been extremely fond of several of my own *Inventions*, and often thought my self secure of the *Grand Secret*, in short, before my Time. This indeed is the common Case of the generality of *rash Enterprizers*, whose wild Schemes are never to be reduc'd to solid Practice. For my own part, I ingenuously confess, that I've found my self many a Time mistaken. 'Tis but a few Years, since I was so sure and forward in my Opinion, as to make an open Experiment of some *Pipes*; which, tho' strong enough for common *Aqueducts*, as they afterwards prov'd, yet undertaking too much, and attempting to raise great *Quantities* of *Water*, too considerable Heights, the

violent *Pressure* of the *Air*, join'd to the *over-bearing Force* of the *Water*, made them give way and burst. And no wonder, for disproportion'd Power or Stress will affect the strongest Bodies. *There's no Fence against Violence*. In the mean Time, I've been taken up, ever since, in finding out, and mending what I judg'd Faulty at that Trial; in devising a certain Method to prevent, as far as possible, such Accidents for the Future; and this I've at last done to my Wish and full Satisfaction, by *altering* some of my *Ingredients*, and all of their *Proportions*.

NOW as to the Nature and Quality of what I shall call my SECRET COMPOSITION; *it*, briefly then, consists of such *Ingredients*, as are, by a strong Heat of Fire, reduc'd to a state of *Fluidity*; melted and run down into a *most compact Solid Mass*, according to the Shape and Dimensions of the given *Model*. I say, my COMPOSITION consists of such *Ingredients*, as (when hot) have a Natural Tendency to *Fluidity* and *Vitrification*; and (when cold) consolidate into the *hardest Stone*, and turn into one absolute and perfect *vitreous Substance*. Thus, by the means of a few *Simple Ingredients*, I am able to run down *my Clays*, or even the *hardest Rock* in *England*, and Cast them in the assign'd *Moulds*, as fast

as the *Lead-Men* do their most *Fluid Metal*. For, so long as the Particles of my *Materials*, are in a disposition to Motion, gliding over one another's Surfaces, all manner of ways, from the *Sphericity* of their own Figures; they'll take the Impression, and assume the Form, of any thing propos'd, in the same easy and expeditious Manner, as *Lead* is known to do.

BUT, that I may be still better understood, I say, *my Ingredients* are naturally made up of the most *solid spherical Particles*; which however are, by a certain degree of *Heat*, to be wrought upon, and put into a Circular Motion, or Ebullition; and, by the contrary Degree of *Cold*, are to be reduc'd to the most *compact solid Body*. For, as the Intervention of the *Firy Particles* disjoins and separates the *Constituent Parts*, and reduces them into a *Fluid*; so when this Motion ceases, and the *Flexibility* is over, the *Corpuscles* come near enough again to feel the Power of one another's *Attractions*. And then there's also an Intervention of *Frigorifick Matter*, which, at the same time, strongly *attracts* them, and is again *itself* strongly *attracted* by them. These *joind Forces* thus fix and wedge down the whole Mass into the most firm and *solid Substance*, into the most strong and *compact Body*. This is the Produce of my SE-

CRET COMPOSITION, and *this* is what I now call my ARTIFICIAL STONE.

ARTIFICIAL STONE then being thus produced, and being to supply the Place, make up the Defects, guard against the Faults, and answer many of the Ends, of *Natural Stone*; it may be proper to insist a little upon *this* too, in order to explain briefly the Nature and Property of this *Artificial Substance*; to account here for its *extraordinary Qualitys* by sound Reason; and to give, in its place, convincing Proof, *ocular Demonstration*, of what may be said in this.

IN doing of which, I confess, I shall be put to't; for, as I don't set up for a profound Scholar of any kind, so I've often found in my self, what I've seen also verify'd in others; namely, that the *Human Mind* is more capable of conceiving *Just Ideas*, than the *Tongue* is of explaining *them*. The *Mind* may be Satisfy'd and Convinc'd of many *Truths*, that the *Tongue* Labours under the greatest difficulty to make out. Not but that I know, some Mens *best Talents* lie in their *Tongues*, as *those* of others do in their *Heads*. But, lest I should be thought to obtrude some *unaccountable Novelty* upon the World; I say, that from the *Smallness* and *Sphericity* of the *constituent*

uent Particles, and from the *adventitious Impulse* of *strong Heat* or *Fire*, they are rapidly agitated all manner of ways, and variously struck against one another; and thus the *Matter*, producing my *ARTIFICIAL STONE*, acquires the Property of *Fluidity*.

I HAVE also observ'd before, that, so soon as this Agitation or Motion ceases, and by the intervening *Cold*, the same *Parts* draw near again to one another. For, the *Particles* of all *Matter* do draw and attract one another, with a certain Degree of Force, when they come within a certain distance. And this *attractive Force* acts most intensely, when the *Corpuscles* touch one another, *as in this Case they do*. Again 'tis to be understood, that in all *component Bodys*, the *attractive Power* is proportionable to their *Density* or *Solidity*; The more Solid, consequently, their *Particles* are, the more powerfully they do *attract*. *Attraction* being then in all *Bodys* as their *Soliditys*; may be hence concluded, that all *spheric Corpuscles, ceteris paribus*, have the strongest *Attraction*: And the Reason is plain, because there is more *Solidity* under such a *surface*, than in any other *Figure*. Consequently from these *two Requisites* of *Sphericity* and *Solidity*, (which are the special *coherent Properties* of every *Atom* in my *composition*) the *Attraction* must needs be

very great, and, of Course, the *Cohesion* of its *Parts* very strong. *Cohesion of Parts*, I repeat, because 'tis on this *Principle*, that the different Degrees of the *Strength* of all *Bodys* depend.

BUT, here, I would have it further understood, that the *Attractive Force*, by which all *Bodies* cohere, is much greater in *immediate Contact*, (which is precisely the case of my *Ingredients*, in this state) than at any distance, how small soever. For, as the several Degrees of the *Cohesion of Parts*, and the several Degrees of the *Solidity* and *Strength* of all *Bodys*, depend upon, and arise from, the several degrees or quantities of the *Contact* of the *constituent Particles*; so these *Particles* touching *any Body* whatever, The *Force* by which they tend towards that *Body*, or the *Force*, by which they *adhere to* it, is always proportional to the Quantity or Degree of *Contact*. For such *Particles* as lie remote from the place of *Contact*, can add nothing to the *Cohesion*, nor consequently, to the *Strength* of any *Body*.

NOW, if these *Principles* be Just, as, I hope, they'll be found upon Review, then 'tis manifest, that the *primary Parts* of my SECRET COMPOSITION, are capable of the most powerful *Attraction*, and the *Component*

ment Particles of my ARTIFICIAL STONE of the strictest *Cohesion*. Of course, then it necessarily follows, that *this same Substance*, THIS STONE, contains in itself, and is endu'd with the strongest *Passive Principle*. And if this be so, 'tis consequently capable to resist powerfully all manner of *Change* or *Alteration of State*; which, I think, is all that can be wished for to Confirm the *Strength* and *Duration* of any *Body* whatsoever: Granting still, that this *Resistance* is always proportional to the *Quantity of Matter* contain'd in, and to the *substantial Density* of the given *Body*.

UPON the whole, in short, if Sir *Isaac Newton* and *others* were right in pronouncing, *all Effects to be proportionable to their adequate Causes*, Then, I'm sure, I cannot be wrong, in what I've here Laid down and undertaken to maintain; namely, in a word, that *my Artificial Stone is more strong and durable than the best Natural Stone*. *My Composition*, in fine, ties down, binds together, and unites the Parts of any *given Body*, much more closely and strictly, than *Nature* does those of *Common Stone*; and consequently renders whatever is made of *its Produce*, infinitely more *compact*, *firm* and *solid*, than any thing made of *Natural Stone* can possibly be or come up to.

IT has been also hinted, that my *Ingredients* have a Tendency to *Vitrification*; which is but a necessary Consequence of what has been advanced; and is another *Advantage* arising from the *Particles* of the *Fluid*, their *shooting together*, in such an extraordinary close manner. This is a *Proof* of what I've been saying, and shews us plainly how near, how immediate the *Contact*; how great, how powerful the *Attraction*; and how firm, how dense the *Cohesion*, of all the Parts of *this Body* must needs be, before *Vitrification* can succeed. How strongly must every *Atom* be combin'd, and how Closely must every *Particle* be join'd and knit together, before this can happen? I call it another *Advantage* too, in regard, that *this* disqualifies and divests the Body (whether great or small) of all *Suction*, and (after the manner of *Glass*) enables it to resist and *shoot off* all Degrees of *Wet*, *Rain* and *Moisture*. And, what's more, renders it impenetrable by *Air*, as well as by *Water*.

THUS, I hope, I've given some Tolerable Account of my ARTIFICIAL STONE, as well as of my SECRET COMPOSITION; and advanc'd some good Reasonings too for its *extraordinary Strength and Duration*. But, because *Reasons* are only presumptive; No *Reason* (how plausible soever) amounting
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to *Proof*, without (what's commonly called) *Demonstration*; it may be ask'd, what *Proofs*, what *Demonstrations*, I can give to Support my *Arguments*? And how I propose to *Convince* the Doubtful and the Diffident, and make it *appear manifest* to all Men, that *my Stone is harder and stronger than Common Stone*?

TO this I answer, *if seeing be any ground for believing*, I can be at no Loss in this respect, no more than in t'other. I can give the *most satisfactory Proofs*, by *ocular Demonstrations*, by *Experiments of Facts*, of several kinds; such as no Man shall be able to refuse to admit *in evidence*, nor to deny as *full and clear Conviction of this Truth*, that in all Respects, belonging to the *Ornaments*, and *ornamental Part of Buildings*, my *Artificial Stone* is preferable to the best of common *Natural Stone*.

HOWEVER, as I'm not busy *writing* to such as may come and see, so I shall not give my distant *Reader* any long Detail here of what can only be best credited *by Sight*. *Curiosity* will move such as are upon the Spot, and have Occasion, to satisfy themselves, for all that I can either say or write. It would then be foreign to my purpose and design, either to make a long *Business* of *this Paper*, or to fill up what I intend only
for

for about half an hour's reading, with *useless Narratives*. Which notwithstanding, as I reserve some variety of *Proofs*, for the Testimony of Men's own *Senses*, according to what may be seen upon the place; so I must not leave my *Friends in the Country* altogether unsatisfy'd. I must therefore beg Leave to convey, if possible, some further *Notion* of the Affair to their *Minds*. And this I propose to do sundry ways; and,

FIRST, by taking two *Pieces*, the one the *best Portland Stone*, cut down to the *exact Dimensions* of the *other Artificial Stone*; placing both in a *Just horizontal Position*, and lying clear in their *Middles*, with equal Bearings at their *Ends*; then Loading them gradually with *Weights*, hung exactly in their *Centers*, till both break down. This done, the difference is Incredible; Modesty will not suffer me to speak on't. *This is better believ'd when seen than told*. Only, in general, I'll venture to say, I can bring my *Stone* to what Pitch or Degree of *Strength* I please. And in proportion to its superiority of *Strength*, it must, in the Course of Reasoning, be allowed to out-last *any Natural Stone whatsoever* a proportionable Time.

SECONDLY, as I make *Pallisades* or *Fences* of all Sorts and Sizes, it has been
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objected, that my *Composition* is thought a *Friable Substance*, and will prove *Brittle* for this Design; and that such as are made of it, will not be able to stand out the little *Shocks* and *Accidents* to which they're commonly liable. To this I answer, that my *Pallisades* are no more *brittle*, than those made of *cast Iron*, which must be allow'd to be a *very brittle Substance*; and yet all the *Rails*, or *Pales*, in use, are made either of *this* or *Wood*. In Evidence of which *Affertion*, I'll engage that a *Joint* of mine will hold out *Blow for Blow*, or any other manner of *Experiment*, with one of *equal Dimensions* made of *cast Iron*.

A THIRD Instance of the *excelling Strength* of my *Stone*, is, that no *Knife*, nor *edg'd Tool*, nor *Mallet and Tool*, nor *Hammer and Chissel*, will so much as touch it; whereas all sorts of *Natural Stone* are wrought upon, and easily cut down, by the *simplest Edge*. I say, the *Artificial Stone* is (by exceeding strong Heat) made so hard, in Testimony of its *Strength*, that no *edg'd Tool* *whatsoever* can possibly affect it; whereas the *common Natural Stone* may be rubb'd and rasp'd down by any trifling *Instrument*.

IN the fourth Place, I don't know any *stronger Proof*, that can be given on this Head, than that the *Artificial Stone*, and

all Goods made of my Composition, do bear and stand out the greatest Heats, the severest Shocks of *Fire*, that the strongest and fiercest *Fuel* in *England* can give them; they must needs too undergo this *Firy Tryal* for several Days and Nights running. Whereas, no *Natural Stone whatsoever* can possibly bear this. Not *one of them*, known to me, is able to resist the Force, but of a *common Fire*, half an hour long. They not only *crack*, but presently *fly* too in Pieces.

FROM these *Premises*, I shall draw the following *certain Conclusion*; namely, that, if *my Goods* are strong enough to bear *Fire*, such *Fire* as is above describ'd, then there can be no doubt, no danger, but that they will hold and stand out all sorts of *Weather*. If this extremity of *Fire* don't touch them, I'm sure, *no Weather can hurt them*. But this I know further too by some short *Experience*. I say, my *Experience*, in this case, is indeed but short, because I can produce nothing of above five or six Years standing; but, considering the Severity of the *Winter*, in 172⁸, and the Variety of all Sorts of *trying Weather* we had in it, besides the *hardest Frost* that we'd had for fifteen Years before, it cannot be thought a *trifling Instance* of this *Argument*, that, *my Goods bid Defiance to all the Violence of Weather, as well as to all the Powers of Fire*.

AND if so, that *no Weather*, nor *Fire itself*, can affect them, then it also necessarily follows, that *no Time can hurt them*. *All-consuming Time*, *Time*, which wears out and sweeps off every *Thing*, all *Substances*, all *Bodies* whatsoever, *animate* and *inanimate*, must let them stand still, untouched, unmolested. And for this I can plead a little longer *Experience*, and, I hope, satisfy my *Reader* too in this *great Truth*, without referring to *Diodore*, *Mela*, *Strabo*, and *others*; as also without sending him to *Egypt*, *Italy*, or any other *Foreign Country* for his Conviction; 'specially since there are many sufficient *Proofs* to be met with in *Old England*. I shall only mention three or four, that either are, or ought to be universally well known.

FIRST then, what can we think of that glorious *Monument* of *Antiquity*, call'd *Mons Ambrosij*, or *STONE-HENGE*, on the *Plain*, about six Miles from *Salisbury*, consisting of vast huge *Stones*, some twenty-eight Foot high, and seven broad, with such proportionable Thickness, that no manner of Carriage could possibly bring them there? Nor can it be alledg'd, that the *Place* produc'd them, for there's not a *Stone*, (great or small) to be found within some Miles round. The famous *Cambden*, *Baker*,
E 2 *Wilkins*,

Wilkins, and *others* are of my Mind, that they are the *Produce* of the *Ancient Art*, *Artificial Stones*, made upon the Spot. Secondly, the *Trophy* or *Monument* of *ROLLRICH STONES*, set in a *Circular Compass*, not unlike *others*, near *Witney*, in *Oxfordshire*, are by *Historians* called the same *Composition*. As is, Thirdly, the *Trophy* erected at *Boskenna*, in *Cornwall*, consisting of eighteen such *Stones*, with the biggest in the Middle. And, Fourthly, on the *River Eden*, near *Salkeld*, in *Cumberland*, there's a most remarkable *Trophy*, commonly call'd *Long Meg and her Daughters*, consisting of seventy-seven such *Stones*, each *Ten*, and *Meg herself* no less than *fifteen Foot* above *Ground*.

ALL our *Antiquarians*, all our *Historians* agree in this, that these are *Artificial*, not *common Stones*. But, as to the *Times* of these respective *Monuments* being erected, they leave us in the *Dark*; Consequently no Man can pretend to know how many *Ages*, they've already stood; tho' we may all conclude *they'll last as long as the Earth itself*. I shall but add one other *Instance*, and that is within the *City of London*; namely, the *Monument* and *Effigy* of the *Famous JOHN STOW*, in the *North Isle* of the *Church of St. Andrew Undershaft*. Which (for as ordinary a Substance as 'tis,

no way comparable to mine) has made a shift to last a hundred and twenty-five Years, and may much longer. But, besides my own Authority, Mr. *Strype*, in his *Vit. Aut.* on *Stow's Survey*, P. 14. says, "*This Figure of Stow, which seems to be Stone, I have been told by Mr. Bagford, an ingenious Person in Antiquities, is nothing else but Clay burnt and painted. He calls it a fine Art, known and practised in former Times; and adds, that there were several such Monuments in the Churches of London, before the great Fire, and particularizes some of them.*" I need not go further on this HEAD, for say what I will, it can amount to no more, than what has already been sufficiently made out, viz. that (barring Accidents, to which all things are subject) *none of the four Elements, nor Time itself, can ever hurt or damage the Fabrick of my Artificial Stone.*

IN the last Place, I hope, 'twill not tend to the *Discredit* of my *Undertaking*, nor leave much ground for *Incredulity*, as to what has been, or may yet be, said in its Favour, that I can tell the World, *I have some Gentlemen of Honour and Fortune, concerned with me in this Affair. Gentlemen of Learning and Ingenuity* too, that have taken all possible Pains, to satisfy and convince themselves, of the *Truth* of what

I have above advanc'd, and of all that I shall pretend to advance upon the SUBJECT. *Gentlemen* that have, rather out of a great and generous *publick Spirit*, than any other *Motive*, countenanc'd and encourag'd it, as a *most useful and ingenious Project*; and, *in fine*, brought it to what it now is.

THESE *worthy Persons* have, upon this Conviction, with great Care and Concern nurs'd it up, and maintain'd it, at a pretty expensive Rate, till now, that *it can walk alone*. Now they are about to usher it into *the World*, for the good of the *Publick*, as well as for that of *itself*. And, that it may *push its Fortune the better*, they are determin'd *not to stint it* in any necessary allowance, nor to *stick at any Charge*, that may contribute to *its deserved Success*. This *Resolution* of the PROPRIETORS, (for so I now call them) is no less *Noble*, than the *Undertaking is great*. And as they have thought fit to *sow in Plenty*, there is a *Probability* of their *reaping in Abundance*. The SECRET, which has cost me so dear, is *their own and their Successors for ever*.

HAVING now thus at large discuss'd the chief TOPICKS of my Discourse, I shall descend to POINTS of an Inferior Nature. And the first, to be touch'd upon in this place, is LEAD; which has had a numerous
Body

Body of *Patrons*, for no other Reason but, because of its *Cheapness*, and coming so considerably *below the Price of Stone*, in the *Ornaments of Houses and Gardens*. For take it in any other sense, and *Portland Stone* has every way the advantage of this *soft and loose Body*.

LEAD, of all Metals, has the loosest and the softest *Texture*. The component Parts of *Lead* are easily separated; They give easy way to every Impulse; because, of all *Metallick Substances*, it has the least *Cohesion* or *Contact of Parts*. And the *Contacts of Lead* being few and small, the *Texture* is easily mov'd and wrought upon, by the least external Force of any kind. If the *Particles of Fire* intervene, or if the *Effluvia* of the SUN rush in upon't, provided they be hot and strong enough, either of *these* will disjoin the Parts of any *Leaden Substance*, and put the whole *Body*, whatever it is, in *Fusion*. I have seen *Lead* melt away, by the *Heat of Vapour* only. In this Country, where the *Sun* is not so very hot, it first *blisters* only, and next *frets* and *decays* quickly.

HOWEVER, 'tis certain, that here, as well as elsewhere, the *Sun*, as well as the *Fire*, gains easy Admission, betwixt all the *Particles of Lead*. And 'tis as certain, that

that the *Effluvia* even of our *English Sun-Beams* have very *visible effects* upon all *Leaden Bodys*, within the *Sphere of their Activity*; tho' no doubt this depends more or less upon the *Heat of the Seasons*: For, by their *Subtilty* and *Electricity*, they make a *sensible Diminution* of the *Weight* of those soft and *weak Substances*; and by their vast *attracting Force*, they surmount all *Degrees of Gravity*, and produce various *other Effects*, such as *Melting, Blistering, Fretting, Mouldering, &c.*

BUT, here it may be also observ'd, that *all such Accidents* are the more or less considerable, and happen sooner or later too, according to the *substantial Density* of the *Work*, and in proportion to the *Quantity of Stuff* contain'd in it. For, thin, light and slight *Bodies*, such as the *Figures* commonly made for Sale, must needs go *very quickly to Pot*. For the *Leaden-Figure-Makers*, striving every one to under-sell his *Neighbour*, drive this business to a *Hair*; and this *Metal* being a *rising Commodity*, they're oblig'd so to do.

AGAIN, besides all that happens afterwards, as above, to the *Goods* made of *Lead*, there are a great many *Accidents*, that they are liable to in the very *Casting* and *Moulding*; witness the many *Faults, Gauls, and Blemishes*

Blemishes to be seen, even when new, in almost every *considerable Piece*; and the *Cankering, Rusting,* and *Falling away,* even of the strongest *Leaden Bodies,* after standing some time in the *Weather.* All which notwithstanding, I know there are several Arguments commonly used in *Favour of Lead*; which I shall endeavour to answer briefly in a few words.

FIRST, then, it is said for *Lead*, that, after all, happen what will, 'tis always worth something, and will still fetch the *Price of Lead.* Upon this Account, I would advise such Gentlemen to *weigh,* and *Compute* the Value of their *Metal* at buying. Then they'll soon find how little proportion *this* will bear to the *Price* of the *Goods demanded,* which are always rated by the *Artificers,* according to the Size and Work of the *Mould* or *Model,* after which they're made. If *this* Work be any thing tolerable to the Eye, it makes *the intrinsick Value of the Stuff,* but *an inconsiderable Article in the Price*; as any one may be easily convinc'd of, that has a mind to try.

SECONDLY, another thing advanc'd in behalf of *Lead,* is, its *Neatness* and *Beauty*; which I allow to be Just. *As the Moulds are, the Goods may be,* with some allowances. But, here I must again observe,

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that

that they, who value *Lead* on this account, know nothing of what can be done in ARTIFICIAL STONE. No *Substance* whatsoever can so easily command, or so readily acquire, the *Beauty* or *Nicety* of the *Shape* and *Figure* of any assign'd *Body*, as *this* can do. In short, I may venture to say that, no *Pencil* can sketch out finer, or draw the *Design* better, than I'm able to produce *the same* in *solid Matter*.

THIRDLY, The *Price*, the *Cheapness* of *Leaden-Ware* (*Leaden-Figures*) is generally urged in its Favour; and indeed 'tis *this*, that has rais'd *it* to a place, in almost all the *Gardens in England*. And here again I must acquaint my *Reader*, that, as in all other respects, I hope, 'tis clear, MY STONE has the *Advantage* of this soft *Metal*; so in this particular too, *it* can never be behind with *Lead*. My *Ingredients* are to be had in several Parts of *England*, tho' not *all* in the same *Place*; which notwithstanding, my *Composition* is of no extraordinary Charge; and the *Preparing* and *Working Parts* are both easily and expeditiously perform'd. What can then hinder *it* to *out-do Lead*, even in *Price* too? Surely, we are able to under-sell *Lead* by much more, than the *Lead-Casters* can afford to under-sell the *Stone-Carvers*. I mean in regard to the *Ornaments* made of *Portland Stone*; those made

made of *Bath* are not worth our Notice. Besides, as our *Charge* is not so great, nor our *Accidents* so many, so neither are our *Losses* and *Damages*, by *Fire*, so considerable as the *Figure-Maker's*.

THIS leads me to another *Observation*, upon my own *WORK*, which I think also proper to take notice of in this Place. Namely, if there be any *Mistake* in the *Preparation*, or *Error* in the *Composition*, or *Flaw* in the *Working*, or, in short, if any degree of *faulty Work* passes thro' my Men's hands, thro' Inadvertency, Carelessness, or otherways, here, in the *Fire*, 'tis discover'd. Here it immediately shews itself. *The Fire is my best Check upon them*. And the *Firy Tryal* is to me all and all: The same as to the Gold and Silver-Smiths, *the Essay of all my Works*. I can safely depend upon the *full Strength* and *Sufficiency* of all Goods, that come safe and sound, without Flaw or Blemish, out of the *Fire*.

BUT as all Business is *liable to Contingencies*, so is this too. And as in *Chymistry*, so also in *this*, what passes thro' the various *Processes*, and comes to *Perfection*, must make up for what falls short and lies by the way. Servants will be Negligent, and Workmen of all Trades will play Tricks; but none of mine shall ever have it in their power, to

Huddle up a Faulty piece of Goods. I have had one *Instance* of this kind, I know and acknowledge it; and but *one only*, among all the *Parcels of Goods* I've Sold these five or six Years past. And this (to be plain) fell out to the Honourable Mr. Secretary *Johnston*, who bought a considerable Quantity, in which there happen'd to be *one single Piece*, thus Faulty and gloss'd over.

HOWEVER, as the little Trick soon shew'd itself, and as, upon discovery, I satisfied that *Curious Gentleman*, (to whose *Patronage* I'm extremely oblig'd) by setting up another in its Room; so I shall endeavour to please all others, that do me the Honour to *deal with*, or *employ me*. I shall take all possible *Care*, that no such *Accidents* shall ever happen again, nor that any such *Imposition* shall ever succeed any more. 'Tis not enough, that I'm Master of a VALUABLE SECRET, nor indeed would this signify much, was it not to be *carry'd on with Honesty, and faithfully executed*. They that know the Pains I've taken for so many Years, to *bring this Affair to bear*, might Justly reproach me, as an *arrant Fool*, if (after all) I should ever put it in the power of my Workmen or Labourers to *damn it*. No, by *strict Care and Diligence*, I hope, to make this both impracticable and impossible. But if, in spite of all Care, and contrary to all

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Probability, any insufficient, or *faulty Work* should ever be found to *come out of my Hands*, I am answerable; I shall make it good, and do the *Purchaser*, whoever he be, *ample Justice*.

THE *Second*, and indeed the only remaining, *POINT*, to be treated in this place, is *CLAY-WARE*, commonly call'd *POTTERS-WARE*. This leads me now (in fine) to explain briefly the Nature of *CLAYS*, so far as they relate to the *Business in hand*. 'Tis then the well-known Property of *Clay*, while wet and moist, to take readily what Form or Figure soever you please to give it; as is evident from the vast Variety of Goods made by the *Potters*. But here we must advert, that their Business consists only in *small Crockery-Ware*, whose Substance is very thin, light and slender; and is consequently easily wrought up and manag'd; whereas in thick, solid and ponderous *Bodies*, the Case differs in all Respects. For, to say nothing of their *Working, Moulding, Drying, &c.* so soon as they come to the *Burning Part*, they *Crack, and fly about their Ears, like Hail-Stones*, and that even in common Fires. And thus it happens to them, for want of good dry Stuff (*proper Ingredients*) to mix with their *Clays*.

BUT,

BUT, in order to remedy this Evil, and to supply this Defect in their *low Affairs*; they've fallen upon SAND, as the only *Medium* fit for their *Purpose*. And this *Sand* again, they find, subjects them to a double Inconveniency; for, if they thus incorporate a *small Quantity*, not only the *Fire* and the *Weather*, but *the very Air* will *tear their Goods to pieces*, as above; and if a *large Quantity* be added, the *Sand* renders the whole *so rotten and crumbly*, that the Goods fail and *Moulder away*, even in their *common standing*, wherever plac'd. And now, what's here to be done, in order to make those faulty Goods *Saleable*? Why, the most considerable *broken* or *crack'd-off Pieces* are to be join'd again, as well as they can; and the *lesser Faults* are to be fill'd or made up again, with (what they call) *Putty*; and then, the whole *Body*, whether great or small, is to be *lick'd or Painted over*, the better still to conceal the Cheat. 'Twas by these very means, of *Putty and Paint*, that my own Men impos'd upon my-self, in Mr. *Johnston's* Parcel, before-mention'd.

I'M ready to detect and lay open this *great Fraud*, as becomes an *honest Man*; and for my own part, am resolv'd, if possible, to prevail with such *Gentlemen*, as
favour

favour me with *their Commissions*, to be present, as well as my self, at the Drawing of the *Kilns*; that they may see their Goods, *in puris Naturalibus*, and as they come out of the *Fire*. For, the *Ingredients* of my *Composition* are such, as not only do the Offices of the *dry Substances* requir'd, and supply my *Clays* with the necessary *Dryness*, &c. but are so far from weakning or prejudicing, in any respect, the Goods, either in, or out of the *Fire*; That, to what Degree or Quantity soever, they're skillfully us'd, they (of themselves) add a vast degree of *Strength* to such Goods; *Strength*, and *Beauty* too, infinitely Superior to what they could any otherways possibly acquire.

HERE, in these very dry and drying *Substances* of my *Composition*, are contain'd the binding and uniting *Particles of excessive Strength*. And here too, lies a great part of my *Secret*, in that, the more of this dry *Substance*, that's put among the *Clays*, the stronger the Goods are and must needs be; their degrees of *Strength* depending entirely on the greater or lesser Quantity of these *Ingredients*. And hence 'tis, that I say, I can raise all my Goods to *what Pitch, to what Excess of Strength I please to bestow upon them*.

IN this Place, and upon this POINT, I think it my Duty to be a little more particular, because 'tis from this Quarter that (I find) *the Publick*, as well as *myself*, will have most to apprehend. Here the *Impositions* are like to be the grossest, and in this, *the Unwary* will be most liable to be deceiv'd. But, in order to make *this Flagrant Truth* still the more Notorious, I think myself oblig'd (not to smother, conceal, or pass over in Silence, but) to give *the World* a full and succinct Account of the *Villainous Attempts*, that have been already made *upon me*, and *my Secret*. Not that I have much to fear from *Imitation*, or *Imposture* of any kind. *No Rogue is worth the Notice of an honest Man*. And yet, for all this, when Men turn *grossly impudent*, it may be allowable to check them; as in this Place, it may be convenient for me to say something on the following *Matter of Fact*, not so much to defend my *Scheme*, which wants no Defence; nor to Justify myself, who can defy the World to lay any thing *to my Charge* but *simple Honesty*, and *eager Industry in the pursuit of my Project*; as to *advertise* and *put the Publick upon its Guard*, against all *Pretenders to my ART*. But lest I should be thought to *censure hard*, or to *determine partially* in my own Favour, I shall say

say no more; but without *Pique* or *Prejudice* to any Man, for my own part, appeal to the *World*; and, for my *Counterfeit*, refer him and his Conduct to the *impartial Reader* of the *following Account*; which is extracted from some *authenticated Papers*, to this Purpose, *viz.*

ABOUT the beginning of *August 1729*, a certain *pretending Architect*, a *Meddling busy Man* (who shall be nameless, so long as Matters stand as they do) thought fit to make use of all manner of little *Artifices*, in order to come at, or find out the *Secret of my Affair*. And, for this End, my *Servants* (my *Journey-Men*) were *tamper'd with* many different ways, and *Decoy'd into Publick-Houses*, that, *being Drunk*, they might be the more easily *sifted* and *impos'd upon*. At other times, Opportunities were taken, in my Absence, and People went over the Water to my *Work-house*, and there pretended to be *Proprietors* or *Partners* with me, and consequently *Masters* over my *Work-Men*, promising (*as such*) to favour them, and *Augment their Wages*. These and all other such like *Devices* were used to *deceive* and *inveigle* the *Unwary Men*, so that they suffer'd themselves to be very *narrowly examin'd*, over and over again, both together, and one by one. And touching my *Affairs*, my *Secret*, my *In-*
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gredients,

gredients, Materials, Mixtures, Utensils
and all the particular Processes, and gene-
ral Methods of Managing, and Carrying on
my Works, " innumerable and endless Que-
" stions (in their own Words) were put to
" them, and ask'd of them, the said Work-
" Men. To all which, (continuing their
" own Words) we thought of no Harm, we
" fear'd no Treachery, nor suspected any
" Roguery, and therefore, answer'd as fully
" as we could; however, without pre-
" tending to give the least Account of, or
" Information about, our Master's Secret,
" or the Secret Ingredients us'd in his
" Composition; which being carefully kept
" in his own Breast only, (for what we
" know); at least, as we ourselves were ne-
" ver let into the Knowledge of these Things,
" we could not possibly divulge them to
" others.

BUT, what is still more remarkable
 than all this, the same Person had the *Cun-*
ning to draw in some of my particular
Friends, Gentlemen of Honour and Probity,
 to be Aiding and Assisting in his vile *De-*
signs. To pass over many material *Cir-*
cumstances, contain'd in the *Originals,* I shall
 only observe here, that, by *their very Means,*
 and under the *pretence* of holding a *consi-*
derable Share, and *advancing the Interest*
of the Undertaking, he procur'd several
Meet-

Meetings with myself; till at last, finding that I was not altogether so *easy to be canvass'd and sifted* as my Men, he had the Modesty to tell me to my Face, that my *Project* was exceeding Good, Excellent, Advantageous, &c. But, if I would not comply with (what he call'd) *reasonable Terms*, and forthwith give him an absolute Right and Title to one Eighth Share in my Undertaking, GRATIS; he would set up against me, and carry on the same Enterprize in Opposition to me. Vowing and Swearing, at the same time, that no Patent should protect me from his Attempts; for, by Ways and Means, he know'd how to elude, or set aside any Patent whatsoever. In a Country of so much Liberty as England, Patents were easily broke thro', under the pretence of setting up some other Affair; or even the same Thing, under another Name.

AND to others, he boasted of what he had done, and could not conceal his own Shame, the mean Tricks he had been guilty of; the very Tricks, by which he confess'd that he had pump'd and squeez'd (as he call'd it) out of these Men, all my Secret; pretending that he had now found it all out, so as to know as much, or more of my Affair of Artificial Stone than my self. But here 'tis to be minded, that the Design of this Ostentation was to draw them (he

spoke to) *into a Secret of his own*. For, he attack'd the same *Persons*, in a few Days time, both by *Words* and *Writing*, to enter into a *New Scheme* with himself; and gave them too some *chimerical Computations*, which he said were *as just as the Light*, promising them (by this *Demonstration*, as he call'd it) immense *Advantages*; such as no Man ever did, or ever will *make good*. But, these *Gentlemen*, to whom he made his first *Application*, knowing the *Origin of the pilfer'd Scheme*, did not think fit to be concern'd in it. They told him, they would have nothing to do with him. They did not incline to *give him the fingering of any of their Money*.

HOWEVER, upon this *Foundation*, for as slender and base as 'twas, and from my own *Proposals* and *Experiments*, whereof he had got a *Copy* from one of my *Friends*, he went to Work, drew out and *publish'd* some *Medley-Advertisements*, and got also some other *Delusive Paragraphs* sily inserted in the *Publick News-Papers*; with *design*, I suppose, to *draw me into a Concession*, if not others *into a Scrape*. I don't know how he succeeded in the latter, but, as to the former, all his *Artifice* had no other effect upon me, than to confirm me in the *Resolution*, I had taken, *to have nothing to do with this Man upon any Terms*.

Terms. However, as he's a *Person of an incomparable Stock*, I doubt not but, *as one Bait fails, he'll hook another.* And, so long as Matters continue *in statu quo*, he shall meet with *no Interruption on my part.* Whereas, if he offers to *run his Lengths* again, both he and I know *what is in my Power*, when I have Occasion to make use on't; Besides *three Original Affidavits*, to confirm, in the most *Authentick Manner*, every *Word* above Written, and many more *infamous Circumstances*; of which however I scorn to take any more *Notice*, unless I find my self oblig'd to't.

I'M heartily sorry for this *Digression*, and still more so, for that I'm under a *necessity* to take some *Notice* of it in this Place, and to trouble the *Reader* with such a *scandalous Account* of any *Man.* But, considering all Things, I hope 'tis excusable; 'specially since the *chief Thing* aim'd at here, is to *warn*, and *put the Publick upon its Guard.* For, it may be suppos'd, that, even after all, *a Man, of this Front, will stick at Nothing.* Again further, in my humble opinion, the least *Complement* I owe to the *Great and Noble PATRON* of this *Treatise*, and the least *Satisfaction* I can give to the *worthy Gentlemen, Proprietors of this Undertaking*, is to *set the Affair in a clear Light*; and to leave as
little

little Ground as Reason for *Cavil* or *Contest*. And for *my self* too, I must add, that, however *vile Practices* and *Impositions* will be carry'd on, as they've always been, yet it don't become me, or any honest Man, to *connive at them*, more than to *have Part in them*.

BUT to return, *My Business* in Hand, is, to shew what *I my self* can do, rather than what others cannot perform. *Meddling* is not my Province, nor does it at all suit my quiet Inclinations. Only, I would not have *Fraud and Deceit* to stand in the way of *Candour and Ingenuity*; nor the foul *Devices of Imposture*, to make Head against the fair Labours of *Art*. This, I say, becomes all good Men, as far as in them lies, to prevent. Because, this carries with it a *double Prejudice* to the *World*.

FIRST, as 'tis not only a great *Discouragement*, but also a real *Obstacle* to the *Progress* of the *Sciences themselves*, and to all Manner of *Ingenuity* in General. Secondly, As, by this means, the *World (in a Lump)* is, or may be, *bubbled*. And, after paying too dear for *Experience*, the *Cheat* is detected. Then, because of this, for being once *deceiv'd*, the Generality of Men will make *Difficulties*, and *narrow Souls* will never *trust again*. For a *Knave's* taking up a

paultry Sum of Money, and not repaying it, an *honest Man* shall not be able to borrow a *Shilling*, tho' his *Life*, as well as his *Credit*, was at stake for't.

BECAUSE of the many *Bubbles* that, of late Years, have been obtruded upon the *Publick*, I might have perish'd and my *Secret* with me, for all the *fairest Offers* and *plainest Demonstrations* I was capable to make, had not *Providence* very accidentally directed and introduc'd me to the *Conversation* and *Acquaintance* of a most *worthy Person*, a *Man of the strictest Principles*, and most *extensive Knowledge*; perfectly well vers'd in the *Qualities of all Terrene and Subterrene Bodies*; and consequently no *Stranger* to the *Powers of Elements*, whether *Natural* or *Artificial*; nor indeed to the *Nature* of my whole *Affair*. And, as in all other Cases, 'tis better to have to do with one *Man of Knowledge and Understanding*, than with *twenty* that know nothing of the Matter; so here too, I found the *easiest Ingress*.

THIS *Gentleman* wanted little more than *Hint* for his *Satisfaction* and *Conviction*. As he was a good *Judge* of all the *Various Effects* and *Operations* of *Natural Bodies*, so the smallest *Item* led him in a *Moment*, to comprehend the *whole Mystery* of

of my Secret; tho' the *Particulars* he often advis'd, and always bid me to keep to my self. To Him then, in short, who shall be nameless, for Modesty's sake, my own and the Success of this Undertaking is entirely owing. For, he first set the *Wheel* a going; The *Wheel*, which will never more stand still; but the better 'tis known, the faster 'twill run. And the *Run* of this *Affair* will depend upon the general Knowledge of its great *Worth*, its just *Value*, and the extraordinary *Qualities* of my artificial Stone; which no *Gloss* of *Words* can possibly set off so well, as the *UNDERTAKING* really and truly deserves.

NOW at last, it may be proper to enter upon *Particulars*, and the *Publick* may desire to know the particular *Application* of this *Artificial Stone*: I mean, to what *Uses* and *Purposes* it is, or may be, particularly converted? But, on this Head, I find, I've no Occasion to enlarge. A good round *Catalogue* of these has been already published for me, by the great *Industry* of another, and runs as follows, viz. *Columns*, *Pedestals*, *Entablatures*, *Cornices*, *Pediments*, *Ballustrades*, *Statues*, *Rusticks*, *Fascias*, *Coppings* of *Walls* and *Chimneys*, *Chimney-Pieces*, *Hearth-Stones*, *Architraves*, *Frontispieces* of *Doors*, *Windows*, *Alcoves* and *Grotto's*, *Cascades*, *Obelisks*, *Arches*.

Arches, Piazza's, Key-Stones, Steps, Pavements, Urns, Balls, &c.

TO all which *Particulars* then, I shall only add a few most *material Articles*, such as *Tomb-Stones, Monuments, Sundials, Crests for Doors, Gates, and Gateways, Statuary of all Sorts, Pipes of all Bores and Sizes*, for the *Conveyance of Water at all Distances*, as good and strong as any ever made by the *Romans*; of which we are provided also with a *Demonstration*. I have now by me, a *Piece or two* made of this same Substance with mine, that were taken up last Year out of the *Sewer at Charing-Cross*; which, by all *Computation of Time*, must have lain there *many Ages*, and looks now as *fresh and sound*, and is actually as *hard and firm*, as the first Day; which, I think, amounts to another *Proof of the Strength and Duration of my Preparation*; in short, that it may *endure to the last Day*. And that my *Composition* is no ways inferior to it, is also manifestly *Demonstrable*.

IN fine, without going about to *describe*, or *descant upon*, *innumerable Particulars*, I shall only say in *general*, that, whatever is, or may be made of *Cut-Stone, of Lead, or of Cast-Iron*, for the *Embellishment of Houses and Gardens*, I am able to make out

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of

of my *Composition of Artificial Stone*. shall run no *Comparisons* with either of *those Substances*, nor with the *Goods* made of either of *them*; because, I hope, it is *truly evident*, that *mine* have, in all respects, the *Advantage* and a vast *Superiority* of *t'others*. I fancy I need say no more, to confirm this *Truth*. The *Superior Strength* is accounted for; The *Superior Beauty* is conspicuous; and the *Prices* are fix'd as near as I can, to about *one Third part* of the *Price of Stone*, and *one Half* of the *Price of Lead*.

AND, that no Mistakes or Impositions may happen, come who will to buy, all shall *meet with the same good Usage*. All shall be serv'd alike. They shall find the *lowest Price Mark'd* upon every *Piece* of the *Goods*. And the *Goods* (not bespoke or commission'd) are to be *seen*, and *Sold* at the *Place*, commonly call'd *Holt's Ware*, or *Work-House*, opposite to *Tork-Building's Stairs* in the *Strand*, and near *Cuper's Bridge*, in *Lambeth*. There's also a *Show of Goods* on the *Gable-End*, towards the *River*, that will *direct* to the *House*; where, at any time, when the *Water* is *above* or *about Half Flood*, *Gentlemen* may *Land at the very Door*, and have nothing to do, but to *step*, or *set their Foot*, out of the *Boat*, into the *House*.

THE *Goods* are only to be sold for ready Money, and as they are or stand in the *Ware-House*. But yet, tho' the *Goods* burn of a beautiful *White*, or *Free-Stone*, *Colour*; or otherways, as I please to have them; if the *Natural Colours* don't take the *Eye* of the *Buyer*; and if so requir'd, they shall be neatly painted, of what *Colour* soever the *Purchaser* pleases; but then they're to be remov'd at his own *Charge*. However, if it should be farther insisted upon, that my *Work-Men* set up the *Goods*, so bought and sold; I design to oblige my *Customers* also in this *Point*, whether in *Town* or *Country*, they however always paying the *Man*, or *Men*, so employ'd, their *Charges*, and *Day* or *Days Wages*, according to what I my self usually pay them.

BUT, if any *Parcel of Goods* is to be sent far off, into the *Country*; then, and in this *Case*, I propose to send along with them, such particular *Directions*, as shall suffice, and enable any careful *Work-Man*, as well as my own, to set them up to the best Advantage. And, as I have also good Reason, even some *Assurances*, to expect Encouragement for and from beyond Seas; where, I doubt not, but my *ARTIFICIAL STONE*, and the *Goods*, (the *Ornaments*) made of it, will surprize as much, and take

as well, as *at home*; it may be convenient to mention it here, and to assure all *Merchants*, or *others*, having occasion to send them *Abroad*, that there can be no Difficulty, in this Circumstance of *setting them up*, by *Directions*, in any part of the *World*, as well, and to as much advantage, as *upon the Spot*. Nor can it be improper to inform the same *Gentlemen*, that, if these *Goods*, (*these Decorations of all Sorts of Buildings*) be but well stow'd in the *Hold*, and the *Stowage* (on *Ship-board*) be but well contriv'd, they may be carry'd as safe to *India*, as cross the *Thames*. I say, with a little more, than *ordinary Care*, they may be safely transported thro' all the *World*.

IN this place, it may be also proper, to acquaint the *Reader*, that, for the *Goods* most in use, and for which, the greatest *Demands* are made, I keep a *Book of Draughts*; which may be carry'd to *Persons of Distinction*, upon Occasion, that they may pick and choose, and please themselves, as to the *Models* of what they want; in case the *Goods made* should not hit their *Taste*. But if any *Gentleman* has a *peculiar Fancy*, or *Device of his own*, I'll undertake to fit him to his *Mind*; and, upon leaving his *Draughts*, and giving his *Commission*, the *Goods* so bespoke, shall be faithfully prepar'd, and as exactly made and modell'd,

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after

after the Designs given, as the Picture (by the best Limner) shall be like the Man.

TO CONCLUDE, I shall now only take leave to add, *in a summary way*, that, whatever has been *advanc'd* in these *Sheets*, is free of all *sinister Views*, without any *Intent* to give *Offence*, much less to *injure* any *honest Man* in his *lawful Occupation*, or in the *Business of his Trade*. *Far be this from me*: But, if I have had a *Wipe* at another, a *Man*, full of new *Fangles*, that has already deserted *several Trades*, besides what he was *bred to*, and *would be at taking up my Art*: If I have *check'd* such a one, I hope, 'tis in *Moderation*, as 'tis with a good *Meaning*, to *reclaim him*, and turn his *Head to something*, that he may be *Master of*; because, *Jack of all Trades was never good at any*. I say, 'tis neither my *Design* nor *Desire* to do *Prejudice to any Man*; my *Purpose* being only, to *lay open* to the *Publick* a most *useful Undertaking*; to give the most *rational and satisfactory Account* I can of it; to *declare* ingenuously what I know concerning it; and (in short) to do what in me lies, *by fair and honest Means*, to get the *considerable Sums*, that have been laid out upon it, *reimburs'd*.

FOR the Rest, if I've not *handled* my *Argument* with the *Judgment* of a *Scholar*,
or

or with the *Craft* of a *Jesuit*, I hope the *good-natur'd Reader* will forgive me in *this*, and pardon me in *other Respects*. *A Man may be honest without great Learning; and may speak Truth without the help of Rhetorick*. I don't pretend to *Erudition*, nor do I set up for other *great Things*. All Men have, or ought to have, the *Privilege of speaking their Minds*, in their own way, and as well as they can, at least, on the *Subject of their proper Affairs*: Tho' few are *Masters of the happy Way, the happy Turn of Expression*. One Man talks well, another Man means well. But, in my humble Opinion, *natural Logick*, (void of *Art*, and stript of all the *Flowers of Oratory*) *sounds best among undesigning Men*. My greatest *Ambition* is to be included in *this Number*; and I have the Happiness to be regarded as *such*, by them, that have some reason to *know me*.

AS for *others*, and that I may not be mistaken by *any*, on account of the *Subject in hand*; I shall briefly *sum up the Whole*, of what has been laid down in these *Papers*, with *this*, that, however *Words* or even *Reasonings*, may admit of *Censure* or *Dispute*; *Matter of Fact* can never err. Let the *Invidious* turn it, and wind it, which way they please, *Matter of Fact* will still be the same. *There's no Arguing against This*. That then my *UNDERTAKING*, my
Arti-

Artificial Stone, and all the *Goods*, (*the Ornaments of Architecture, the Embellishments of Buildings*) made of it, will answer the *Account* and *Character* I've endeavour'd to give of *them*, I shall warrant. As in *all other Cases* of Life, I would rather be deceiv'd, than deceive; so in this too, I shall take it upon myself, both now and hereafter, to support and uphold all my *Goods*, for any reasonable Space of *Time*, (*I might say for any Time*;) against all *Weathers*, and against every *Thing else*, that can be imputed to any *Insufficiency* in themselves, *Accidents* and *Violence* only excepted.

AND finally, if, contrary to this true *Meaning*, and to the *Intention* of this *just Scheme*, any *Fault*, or faulty Piece of *Work* shall ever be discover'd to pass thro' my Hands; then, and in this Case, I shall be oblig'd to *make good* such faulty and insufficient *Work*, either by putting up others in their Room, or by *Returning the Money* paid for such *Goods*. This, as I take it, not only amounts to *another*, and to a *new Demonstration*; and is as *weighty a Proof* as any, of the *Worth* and *Strength* of my *ARTIFICIAL STONE*; but is also *the best and fairest Offer* I'm capable to make, in *Evidence of the Truth of the foregoing Premises*.

F I N I S.

I have been thinking of you
 and of the days when we
 were together, and how much
 I have missed you. I have
 been so busy lately, but
 I have found time to write
 to you. I hope you are
 well and happy. I have
 been thinking of you very
 much, and I have been
 hoping to hear from you
 soon. I have been so busy
 lately, but I have found
 time to write to you. I
 hope you are well and
 happy. I have been thinking
 of you very much, and I
 have been hoping to hear
 from you soon. I have been
 so busy lately, but I have
 found time to write to you.

I have been thinking of you very much lately, and
 wondering how you are getting on. I hope you are
 well and happy. I have been very busy lately, but
 I have managed to find some time to write to you.
 I have been thinking of you very much lately, and
 wondering how you are getting on. I hope you are
 well and happy. I have been very busy lately, but
 I have managed to find some time to write to you.

